

## State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-3406 FAX (603) 271-7894



April 30, 2002 Letter of Deficiency DAM #182.03

Mr. Tom Grones Wausau Papers of NH, Inc. 3 Mechanic Street Groveton, NH 03582

RE: Brooklyn Dam, Northumberland

Dear Mr. Grones:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 19, 2001. During this visual inspection and/or file review, the following deficiencies were observed:

- 1 There is light brush on the downstream right spillway abutment;
- 2. There is concrete erosion and spalling on the left abutment of the overflow spillway;
- 3. Downstream concrete abutments of the sluice gates have concrete erosion, most notably on the inside right abutment of gate 4 (see photo 3) and on the inside left abutment of gate 1, which is also the same area as the downstream right face of the flood gate (see photo 3);
- 4. Spalling is present on the downstream concrete right wall of the powerhouse, above the spillway slab:
- 5. There is concrete erosion on the entire downstream concrete face of the powerhouse;
- 6. In the forbay, there is concrete erosion and spalling on the upstream right abutment wall, extending from the floodgate to a distance of approximately 20 feet; and
- 7. In the forbay, there is concrete erosion on the lower portion of the upstream left abutment wall; and
- 8. There is no operations and maintenance plan on file with the DES.

A sketch and photos of these deficiencies are included with this letter.

http://www.state.nh.us TDD Access: Relay NH 1-800-735-2964

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DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

## **September 30, 2002:**

- 1. Remove the light brush on the downstream right spillway abutment to a distance of 30 feet from the end of the spillway apron; (see photo 1)
- 2 Patch the concrete erosion on the downstream concrete abutments of the sluice gates.

  Specifically the inside right abutment of gate 4 and on the inside left abutment of gate 1, which is also the same as the downstream right face of the floodgate; (see photo 3)
- 3 Prepare and submit to the DES a written operational procedure plan The plan should describe the maintenance procedures and identify emergency contact personnel;

## **Continuously Monitor:**

- 4. The concrete erosion and spalling on the left abutment of the overflow spillway; (see photo 2)
- 5 The spalling areas on the downstream concrete right wall of the powerhouse; (see photo 4)
- 6 The concrete erosion on the downstream concrete face of the powerhouse; (see photo 4&5)
- 7. The concrete erosion and spalling on the upstream right abutment wall of the forbay; (see photo 6) and
- 8 The concrete erosion on the lower portion of the upstream left abutment wall of the forbay (see photo 7)

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

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If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,



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attachments Guideline for an O&M plan, DB8, DB13, sketch & photos cc: Gretchen Rule

Town of Northumberland

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